

REMARKS/ARGUMENTS

Claims 3 and 4 are pending in this application.

Applicant appreciates the Examiner extending the courtesy of the telephone interview on May 6, 2008. During the telephone interview, Applicant's representative pointed out that Truchsess (U.S. 5,734,726) does not teach concurrently outputting first and second sound signals. In particular, Truchsess teaches that the sound signals (e.g., acceleration segments 1-5, maximum speed segment 6, and deceleration segments 7-10) must be played sequentially (hereinafter, the sound "segments" of Truchsess will be referred to as sound "signals" for convenience). Figs. 1, 2A, and 2B of Truchsess unequivocally show that the sound signals must be played sequentially one after the other, not concurrently. The Examiner acknowledged that Truchsess does not teach outputting the first and second sound signals concurrently, but alleged that the acceleration and deceleration sound signals of Truchsess are outputted "almost" concurrently. Applicant will address the Examiner's argument below.

Claims 3 and 4 were rejected under 35 U.S.C. § 102(b) as being anticipated by Truchsess.

Claim 3 recites:

A sound synthesizer for generating a sound that simulates the sound of an internal combustion engine having a plurality of cylinders, the sound synthesizer comprising:

a memory arranged to store engine sound data corresponding to at least one operational state of the engine based on a firing interval of the cylinders; and

an output generator arranged to concurrently output first and second sound signals based on the engine sound data stored in the memory; wherein

the output generator controls the first and second sound signals such that the first sound signal has at least one of a first pitch that is variable for each firing interval and a first volume that is variable for each firing interval, and the second sound signal has at least one of a second pitch that is variable for each firing interval independently of the first pitch of the first sound signal and a second volume that is variable for each firing interval independently of the first volume of the first sound signal. (emphasis added)

The Examiner alleged that Truchsess teaches all of the features recited in claim 3 including "an output generator arranged to concurrently output first and second sound signals (col. 2, lines 29-37)". Applicant respectfully disagrees.

Column 2, lines 29-37 of Truchsess disclose:

Broadly speaking, the present invention is a sound generating device for simulating auto engines and other motors. The device comprises a first plurality of data corresponding to a first plurality of sounds, a second plurality of data corresponding to a second plurality of sounds, wherein some of the second plurality of sounds share a common sound characteristic with the sounds in the first plurality of sounds, storing means for storing the first and second pluralities of data, and a speaker.

In the above passage of Truchsess, the first and second plurality of sounds correspond to the acceleration signals and the deceleration signals (see, for example, column 3, lines 49-52 of Truchsess). Clearly, an acceleration signal is a different signal than a deceleration signal. Further, there is no disclosure, suggestion, or reason whatsoever in Truchsess that the acceleration signal would be played or output at the same time or concurrently with the deceleration signal. Further, in view of the fact that these are clearly opposite signals (e.g., acceleration vs. deceleration), one of ordinary skill in the art would clearly recognize that such opposite signals should not be played or output simultaneously.

The "common" sound characteristic mentioned in the above-quoted passage of Truchsess merely describes that each of the different and opposite acceleration and deceleration signals may have the same pitch or loudness (see, for example, claims 6, 7, 13, and 16 of Truchsess). Thus, the common sound characteristic of the sound signals of Truchsess has nothing to do with the timing in which the first and second plurality of sound signals are outputted, i.e., the common characteristic is NOT a concurrent output of the first and second plurality of sound signals of Truchsess.

In fact, as pointed out during the telephone interview of May 6, 2008, Truchsess clearly teaches that the acceleration signals 1-5, maximum sound signal 6, and the deceleration signals 7-10 are played at different times. Each of Figs. 1, 2A, and 2B

show that any one of the signals 1-10 may be played in any particular order, but never concurrently or at the same time. Fig. 2A of Truchsess shows a "jump" from sound signal 3 to sound signal 9 (accelerator release point), and Fig. 2B shows a "jump" from sound signal 9 to sound signal 4 (accelerator press point). See, for example, column 4, lines 37-49 of Truchsess, which describes how the signals "switch" from one to the other, i.e., they do not overlap in time so as to be outputted concurrently. This is further demonstrated in the flow chart in Fig. 3 of Truchsess which describes examples of "jumping" from any one of three signals to another of the three signals.

The Examiner's allegation during the telephone interview of May 6, 2008 that the first and second sound signals of Truchsess are "almost" outputted concurrently is not sufficient for a prior art rejection of claim 3 under 35 U.S.C. § 102(b). In fact, this allegation that the first and second signals of Truchsess are "almost" outputted concurrently is a clear admission that these two signals are NOT outputted at the same time or concurrently.

The Examiner is reminded that a "claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

As noted above, the first and second signals are clearly opposite signals (e.g., acceleration vs. deceleration), and therefore, one of ordinary skill in the art would clearly recognize that such opposite signals should not be played or output simultaneously. Accordingly, Applicant's claimed invention would not have been obvious in view of Truchsess, or any proposed modification thereof.

Paragraphs [0050]-[0052] of Applicant's specification explain that outputting the first and second sound signals concurrently avoids a monotone engine sound and produces a more realistic engine sound. See also Applicant's Fig. 6 which shows the first and second sound signals being outputted concurrently in time. Truchsess does not remotely teach or suggest that the first and second plurality of sound signals should, or could, be outputted concurrently. In fact, given the opposite nature of the first and

second signals of Truchsess, it is clear that Truchsess teaches away from Applicant's claimed invention.

Thus, Truchsess clearly fails to teach or suggest the feature of "an output generator arranged to concurrently output first and second sound signals based on the engine sound data stored in the memory," as recited in Applicant's claim 3.

Accordingly, Applicant respectfully submits that Truchsess fails to teach or suggest the unique combination and arrangement of elements recited in Applicant's claim 3.

In view of the foregoing remarks, Applicant respectfully submits that claim 3 is allowable. Claim 4 depends upon claim 3, and is therefore allowable for at least the reasons that claim 3 is allowable.

In view of the foregoing remarks, Applicant respectfully submits that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

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